

POWER STRUCTURE OF CLASS HIERARCHY
FOR EXAMPLE LIBRARY

FIG. 1

```

FLOAT func1(FLOAT);
FLOAT func2(FLOAT); ← 25
void main{
  FLOAT a,b,c;
  b=func1(a);
  c=func2(b);
  return 0;}

```

Pure FLOAT Model

FIG. 2

```

ToInt func1(ToInt);
I64_B func1(I64_B);
FLOAT func2(FLOAT);
void main{
  ToInt a,b; ← 33a
  FLOAT c;
  b=func1(a);
  c=func2(b.data);

  return 0;}
ToInt func1(ToInt d)
{I64_B e(d);
  I64_B f;
  f=func1(e);
  return (ToInt) f;}

```

Mixed Model

FIG. 3

```

FLOAT func1(FLOAT);
ToInt func2(ToInt);
I64_B func2(I64_B);
void main{
  FLOAT a;
  ToInt b,c;
  b.data=func1(a);      ← 33b
  c=func2(b);
  return 0;}
ToInt func2(ToInt d)
{I64_B e(d);
  I64_B f;
  f=func2(e);
  return (ToInt)f;}

```

Mixed Model

FIG. 4

```

I64_B func1(I64_B);
I64_B func2(I64_B);    ← 35
void main{
  I64_B a,b,c;
  b=func1(a);
  c=func2(b);
  return 0;

```

Pure Fixed Model

FIG. 5

23 ↗

39	38	37	36	35	34	33	32
AG 7	AG 6	AG 5	AG 4	AG 3	AG 2	AG 1	AG 0

31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16
AH 15	AH 14	AH 13	AH 12	AH 11	AH 10	AH 9	AH 8	AH 7	AH 6	AH 5	AH 4	AH 3	AH 2	AH 1	AH 0

15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
AL 15	AL 14	AL 13	AL 12	AL 11	AL 10	AL 9	AL 8	AL 7	AL 6	AL 5	AL 4	AL 3	AL 2	AL 1	AL 0

Layout of TMS320C54x Accumulator A

FIG. 6

23 ↗

31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16
BH 15	BH 14	BH 13	BH 12	BH 11	BH 10	BH 9	BH 8	BH 7	BH 6	BH 5	BH 4	BH 3	BH 2	BH 1	BH 0
15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
BL 15	BL 14	BL 13	BL 12	BL 11	BL 10	BL 9	BL 8	BL 7	BL 6	BL 5	BL 4	BL 3	BL 2	BL 1	BL 0

39	38	37	36	35	34	33	32
BG 7	BG 6	BG 5	BG 4	BG 3	BG 2	BG 1	BG 0

Layout of TMS320C54x Accumulator B

FIG. 7

39	38	37	36	35	34	33	32
G7	G6	G5	G4	G3	G2	G1	G0
gh 31	gh 30	gh 29	gh 28	gh 27	gh 26	gh 25	gh 24

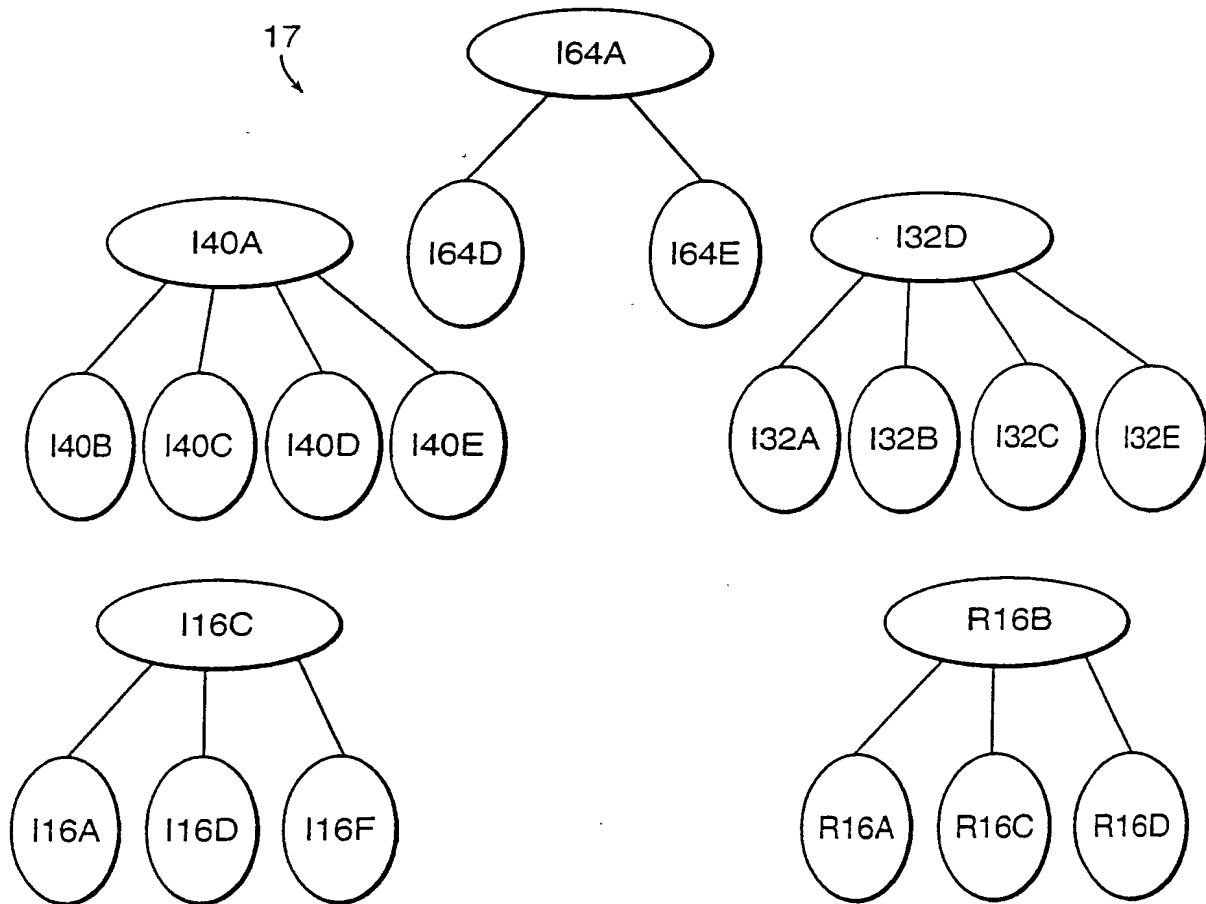
21 ↗

31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16
H 15	H 14	H 13	H 12	H 11	H 10	H 9	H 8	H 7	H 6	H 5	H 4	H 3	H 2	H 1	H 0
gh 23	gh 22	gh 21	gh 20	gh 19	gh 18	gh 17	gh 16	gh 15	gh 14	gh 13	gh 12	gh 11	gh 10	gh 9	gh 8

15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
L 15	L 14	L 13	L 12	L 11	L 10	L 9	L 8	L 7	L 6	L 5	L 4	L 3	L 2	L 1	L 0
gh 7	gh 6	gh 5	gh 4	gh 3	gh 2	gh 1	gh 0	low 7	low 6	low 5	low 4	low 3	low 2	low 1	low 0

Layout of 140 class data members

FIG. 8



POWER STRUCTURE OF A CLASS HIERARCHY

FIG. 9

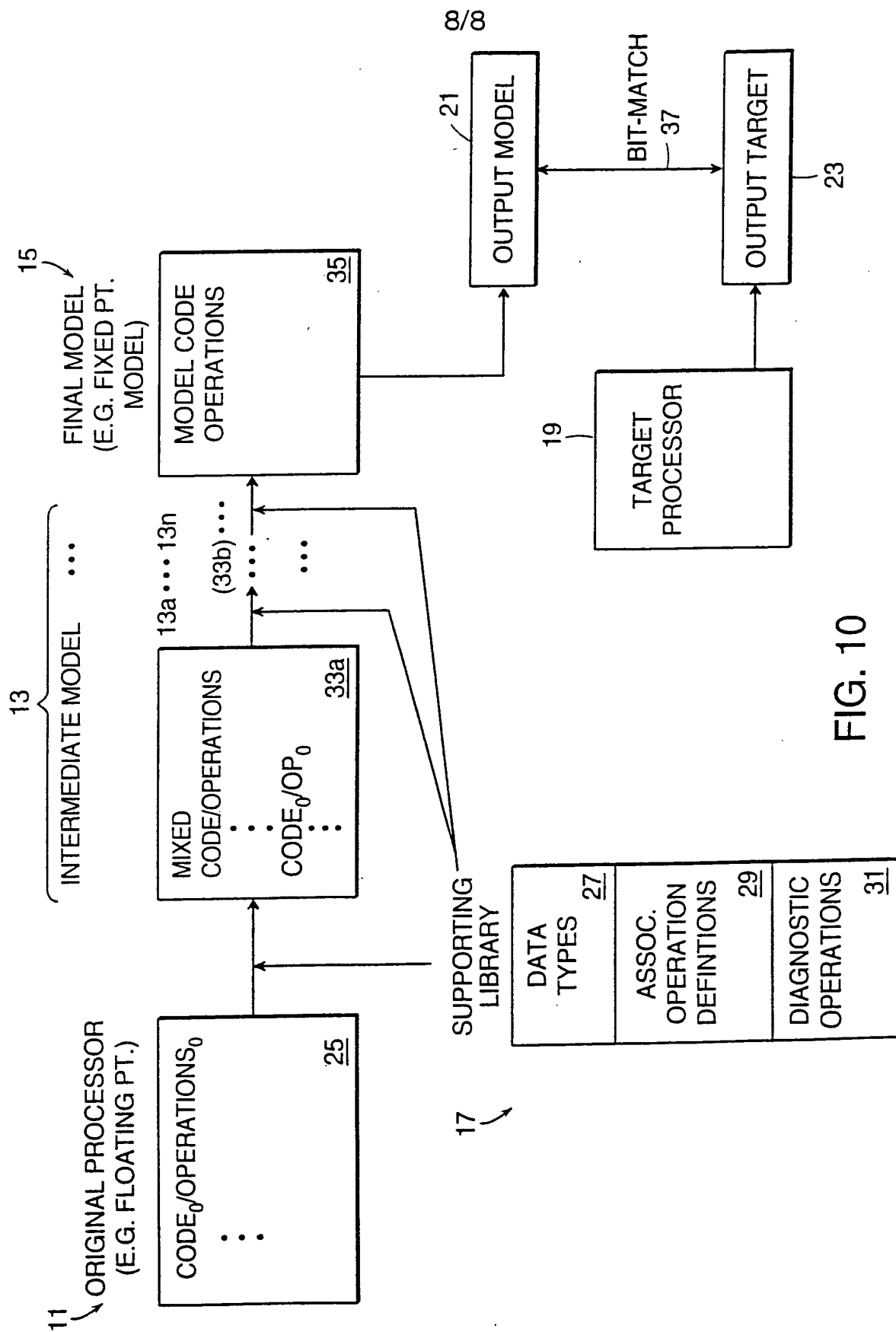


FIG. 10